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NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

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Quarterly Progress Report

September - November 1973

Investigation Title: Utilization of EREP Data in Geological Evaluation
Regional Planning, Forest Management, and Water
Management in North Carolina

EREP Investigation No.: 018

Contract No.: NAS9-13321

Principal Investigator: Charles W. Welby



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During the third quarter of the contract delivery of the Asheville area imagery from SKYLAB-2 was completed. Preliminary evaluation of the imagery indicates a limited usefulness because of cloud cover. However, more intense study is expected to provide information about the usefulness of the imagery for specific purposes, such as analyses of forests and recognition of different vegetation types in western North Carolina.

During the pass of SKYLAB-3 across North Carolina along track 43 on September 19, 1973, a low altitude "groundtruth" flight was made to the High Rock Lake, and Winston-Salem, and Greensboro areas. Hand-held 35-mm cameras were used to collect data in these areas. Film types used were Ektachrome and Ektachrome Infrared.

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E74-10231) UTILIZATION OF EREP DATA IN
GEOLOGICAL EVALUATION REGIONAL PLANNING,
FOREST MANAGEMENT, AND WATER MANAGEMENT
IN NORTH CAROLINA (North Carolina State
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A limited amount of the imagery from this portion of the EREP experiment has been received (S-191, S-192) but none of the color infrared, the color Ektachrome or the multispectral photographs have been received. Without the photographic materials the others are of limited usefulness.

Contacts with state agencies regarding the use of the imagery continue. We expect intensification of these contacts when all of the imagery is available.

During the coming quarter the SKYLAB imagery available to us will be worked on by students in a photogeology class in addition to work to be carried on by the investigators and graduate assistants. Use will also be made of data obtained from ERTS-1 and U-2 overflights. Thus a comparison of the several types of data will be possible, and their relative merit to monitoring and evaluation of North Carolina's natural resources and environment will be assessed.

A limited amount of funding from University sources for computer analysis of the S192 materials has been obtained, and some work will be attempted during the coming quarter if appropriate programs can be obtained.

Unless the imagery from SKYLAB-3 is received soon, it will be necessary to request an extension of the contract beyond the present June 30, 1974 expiration date. Whether this will be a no-cost request or whether a modest amount of additional funding will be required cannot be accurately determined at this point in time.